

WHAT IS CLAIMED IS:

1 1. A radio communication terminal comprising:
2 a plurality of antennas;
3 an antenna switching unit for switching an antenna to
4 another;
5 a receiver for amplifying a received signal under
6 automatic gain control;
7 a power calculator for calculating received signal
8 power;
9 a memory for storing the calculated power values; and
10 a power determining unit for selecting an antenna
11 which receives the largest signal power; and
12 wherein the received signal is received during a high speed
13 operation when the receiver starts.

1 2. The radio communication terminal according to claim 1,
2 further comprising a gain calculator for calculating a gain
3 based on an output from the receiver.

1 3. The radio communication terminal according to claim 2,
2 further comprising a gain controller,
3 wherein the gain calculator outputs the gain to the power
4 calculator and the gain controller.

1 4. The radio communication terminal according to claim 1,
2 wherein the power control unit controls the antenna

3 switching unit to switch the antenna.

1 5. The radio communication terminal according to claim 1,
2 wherein the power determining unit compares the power
3 values stored in the memory for each of the antennas.

1 6. The radio communication terminal according to claim 1,
2 wherein, based on a gain and output of the receiver, the
3 power calculator calculates the power of a signal received
4 through each of the antennas.

1 7. The radio communication terminal according to claim 1,
2 wherein the receiver employs direct conversion method.

1 8. The radio communication terminal according to claim 2,
2 further comprising an average power calculator for
3 calculating an average power of a plurality of signals
4 output from the receiver.

1 9. The radio communication terminal according to claim 8,
2 wherein the average power calculator outputs the average
3 power to the gain calculator and the power calculator.

1 10. A radio signal receiving method comprising the steps
2 of:

3 receiving a radio signal through one of a plurality of
4 antennas by a receiver operating under automatic gain

5 control;
6 calculating the power of the received radio signal
7 based on a gain and output of said receiver;
8 switching the antenna to another;
9 storing the calculated power for each of the antennas
10 in a memory;
11 calculating a gain based on the output of said
12 receiver and setting the calculated gain in said receiver;
13 and
14 selecting an antenna which receives an signal with the
15 largest power.

1 11. The radio signal receiving method according to claim
2 10, further comprising a step of calculating an average
3 power of a plurality of signals output from the receiver.

1 12. The radio signal receiving method according to claim
2 10, wherein each of the steps is executed during a high
3 speed operation of said receiver when said receiver starts.

1 13. The radio signal receiving method according to claim
2 11, wherein calculation of the average power is performed
3 within a period in which a predetermined gain is retained
4 in the receiver and after the receiver stabilizes.

1 14. The radio signal receiving method according to claim
2 11, wherein, when calculation of the average power is

3 initially executed, the calculation is performed within a
4 period in which a predetermined gain is retained in the
5 receiver.

1 15. The radio signal receiving method according to claim
2 10, wherein the power of the radio signal is calculated a
3 number of times for each of the antennas.

1 16. The radio signal receiving method according to claim
2 15, wherein the calculated powers are added up.

1 17. The radio signal receiving method according to claim
2 11, wherein setting of the calculated gain in the receiver
3 is performed after calculation of the next average power
4 ends.

1 18. The radio signal receiving method according to claim
2 11, wherein switching of an antenna to another is performed
3 after calculation of the average power ends.